



Development Guidelines

CONTENTS

1.0 INTRODUCTION

2.0 SITE DESIGN

3.0 ACCESS and PARKING

4.0 URBAN DESIGN TREATMENT

5.0 LANDSCAPE TREATMENT

1.0 INTRODUCTION CHAPTER

Introduction

The Lagos FTZ Design Guidelines apply to all the investors on the Lagos FTZ land subject site.

Purpose

The purpose of the guidelines is to achieve the desired standard of plot planning, urban design, architectural and landscaping designs for the development works.

The Development Guidelines stated in this report are general guidelines that have to be adhere although there may be some flexibility to satisfy the specific industry's requirements. Some flexibility may be allowed on a case to case basis to encourage creativity on the part of project designers for their specific.

The Design Guidelines provide "easy to apply" criteria aimed at ensuring a consistently high standard of development throughout the life of the project, contributing to the creation of a pleasant working environment and maintaining value in business investment to the economic benefit of prospective developers and business.

The other purpose of the guidelines is to provide guidance to the Client and their new investor on the guidelines and controls governing their plot development within the site and subdivision requirements within the Lagos FTZ. It aimed to ensure that industrial, commercial, residential and other uses within Lagos FTZ are functional and attractive and orderly environments for business, operators, workers, visitors and residents of Lagos FTZ.

Guideline Objectives

- To classify, designate and regulate the use of land for industrial, residential, commercial, logistics, Open Space and other purposes in accordance with sound planning principles and practices;
- To facilitate the development of functional, well serviced, amenable, and attractive industrial, commercial and residential areas that have regard to the local context;
- To achieve an attractive and unified development which acknowledges the goal of conserving and enhancing the natural environment by emphasizing sustainable and complimentary landscaping, as well as designed, functional and efficient buildings which enhance the users corporate and professional image;
- To regulate and limit the height and size of buildings and other structures;
- To guide the design and appearance of the development;
- To set the guidelines for the development so as to prevent or minimize potential hazards from fire, flood and accidents etc.;

Terminology

For the purpose of this, the following words and phrases shall have the following meanings scribed to them document

Terms

Description

Ancillary Use

A use which is ancillary to the principal building, or use of the principal building, situated on the same site, or;
A use which is ancillary to the principal use on the same site.

Amendments

A physical change to the land use, technical or infrastructure intent which requires approval.

Boundary Fence

A free-standing structure of metal, masonry, wood or combination of the above, located at the boundary of the plot. All walls and fences, including foundations, shall be placed entirely inside the lot to which they belong except where common walls are agreed upon by both property owners. For Lagos FTZ, the height range of the boundary wall should be specified.

Buffer Zone

A strip of land is established to protect one type of land use from another with which it is incompatible. Green buffers are usually landscaped areas.

Building Height

The vertical distance measured from the average elevation of the finished grade at the front of the building to the highest point of the structure, exclusive of parapet walls, roof structures for elevators and stairways, and ventilating fans. Mechanical equipment, chimneys, air conditioners, water tanks, and similar appurtenances may not exceed maximum building height by more than 5 metres.

Building Line

The line that is located at the front yard setback of a lot and at which determines where the front of the building shall be located.

Building Permit

An authorization granted by the authorities certifying that the design of a proposed structure to be erected on a designated plot complies with all relevant provisions applicable to the use or uses which the structure will contain. The

Building

permit allows building construction to commence.

A permanently located structure having a room supported/enclosed by walls or columns but excluding any courtyard such structure may have; provided however, that no form of fabric tent or vehicle shall be considered a building.

Conditional Use

A use which has certain characteristics which may be detrimental to the neighborhood, but which may be permitted within a zone other than permitted use, and requires a conditional use permit from relevant authorities.

Development

The construction, reconstruction, conversion, erection, alteration, relocation or enlargement of any building or structure; any mining, excavation or landfill; and any land disturbance in preparation for any of the above.

Easement

A strip of land acquired by reservation and intended to be occupied by electric transmission lines, oil or gas pipeline, water line, sanitary or storm sewer and other similar uses.

Egress

An exit.

Floor Area Ratio (FAR)

Floor Area Ratio of a plot is determined by dividing the "Gross Floor Area" of the building or buildings situated within the plot by the "Total Plot Area".

Plot ratio = Total Gross Floor Area/ Total Plot Area

Gross Floor Area

The sum of the gross floor areas of all the floors of a building measured from the exterior faces of the building or the centre line of the common walls between 2 buildings.

Industry

Land used for any of the following operations:

- Any process of manufacture
- Dismantling or breaking up of any article
- Laundering, repairing, servicing or washing any article, machinery, or vehicle, other than on-site work on a building, works or land
- Any process of testing and analysis
If, on the same land as any of the above operations, the following ancillary uses can be included:-
- Storing goods used in the operation or resulting from it

- Providing amenities for people engaged in the operation
- Selling by wholesale, goods resulting from the operation
- Office uses which is in connection with the operation

Ingress	An entry.
Landscaping	The greening of the lot with grass, shrubs and or trees. Landscaping may include pedestrian walks, parking areas, flower beds, fountains and street furniture.
Lot or plot	A parcel or plot of land occupied by or to be occupied by one principal building and its ancillary buildings and including the open spaces required in terms of the regulations.
Lot Area or plot area	The area of a horizontal plane bounded by the front, side and rear lot lines. The total extent of surface, measured in a horizontal plane, within the lot lines of a lot. Lot area shall eventually have a survey area.
Lot Coverage	That percentage of a lot which when viewed directly from above would be covered by the building within the lot.
Loading Space	Space logically and conveniently located for bulk pickups and deliveries, scaled to delivery vehicles/containers expected to be used, and accessible to such vehicles when required.
Local Centre	This is synonymous as neighborhood centre where a range of shops; restaurants; prayer halls, banks, clinics; and post boxes are located. Some recreational activities may also be housed in these centres.
Permitted Use	A use by right which is specifically authorized in the development regulations and zoning.
Regulations	A set of rules that sets the standards for development and normally imposed by the Authority.
Right of Way	Right of way or areas designated as public property for roads and service corridors including the roadside landscaping strip.
Setback Line	The minimum horizontal distance between the property line of the development lot and the walls or roof of a building or structure.

Signage	Any device used to identify, describe, sell or display by letter, number or graphics.
Site Plan	Arrangement of the external physical environment in complete detail, including structures, landscaped, land contours, vehicular and pedestrian circulation, drainage and the entire complex of physical forms.
Site Plan	Arrangement of the external physical environment in complete detail, including structures, landscaped, land contours, vehicular and pedestrian circulation, drainage and the entire complex of physical forms.
Zone	An area of land shown on the official Zoning Map or described herein within which uniform regulations for the use and development of land as set forth in these Regulations shall apply.
Vehicular Parking Area	Land used to park heavy vehicles, cars etc.

2.0 SITE DESIGN

Building Height

The objectives of building height guideline are as follows:

- To ensure building heights respond to the predominant scale of built form in the area;
- To ensure building are appropriately scaled to maintain key views from surrounding areas;
- To ensure industrial and commercial buildings have minimal impact on the amenity of the adjoining public realm and residential areas.

Height of the Building : 2 story

Setbacks

The setback requirement serves to safeguard a physical separation space between the building and the plot boundary. The side and rear building setback is to protect the occupiers of the building and adjacent buildings by minimizing overshadowing and visual intrusion as well as to allow safety vehicle to pass in case of emergency.

The Guideline :

Front : 10 Mtr.

Sides ; 10 & 3 Mtr.

Back : 3 Mtr.

With regard to the landscape area within plot, building setback is aimed to achieve the following objectives:

- To create cohesive streetscapes that are characterized by consistent building setbacks;
- To provide active and pedestrian friendly streets by providing dedicated pedestrian lanes;
- To ensure the siting of buildings provides adequate space for landscaping and planting and strengthens the landscape character of the area.
- To minimize impacts of overshadowing within the site and on adjoining uses.

Sample of building setbacks



Front setback

- Minimal landscape features
- Car parking bays
- Security post



Side Setback 1

- Minimal landscape features
- Internal road circulation
- Infra utilities (fire hydrant and hose)



Side Setback 2

- Minimal landscape features
- Internal road circulation
- Loading and unloading areas



Rear Setback 1

- No landscape feature but is encouraged to provide strip planting
- Internal road circulation and parking bays
- Loading and unloading areas

Storage, Loading and Services

Storage, loading and services areas are also essential plot amenities. The following objectives and guidelines shall be taken into consideration prior to approval of any development in Lagos FTZ.

Waste Storage

The guideline provides guidance to ensure that adequate access to waste and recycling facilities is provided for each plot. It will also ensure that waste storage and treatment areas do not detrimentally impact on the amenity of streetscapes and the quality of stormwater. The guidelines are as follows:

- All plots are to provide dedicated waste and recycling storage areas;
- Waste storage and recycling areas should be located away from the road frontage, staff amenity areas and stormwater drains. They should not be located in front of the building, within landscaped areas, driveways, car and truck parking spaces and vehicle turning areas;
- Waste and recycling storage areas should be adequately screened from the public realm, staff amenity areas and adjoining properties utilizing landscaping as or structural screening;
- New developments are encouraged to demonstrate methods to minimize the production of waste as well as recycling and the re-use of waste materials.

Goods Storage

While the goods storage guideline is prepared to ensure goods storage areas are appropriately sited and designed to minimize impacts on streetscapes. The guidelines are as follows:

- Goods storage areas should be located behind the building line and located away from stormwater drains. Goods storage areas should not be located within landscaped areas, driveways, car and truck parking spaces and vehicle turning areas;
- Goods storage areas should be appropriately screened from key public viewing locations;
- If goods storage areas are to be accessed by customers on a regular basis, safe pedestrian access should be provided.

Loading and Services Areas

The intent of this guideline is to provide safe and efficient loading and servicing particularly the industrial and commercial plots. It will also minimize the visual impact of loading bays and service areas when viewed from the surrounding roads and other key viewing areas. The guidelines are as follows:

- Whenever possible, loading areas should be located to the rear or side of the property away from the primary road frontage;
- Where practical, integrate loading areas into the design of the building so that loading occurs internally. Where external loading areas are visible from adjoining land uses, they should be screened with landscaping or articulated built form;
- Loading and servicing should occur with the vehicle completely contained within the site. No part of the vehicle should extend into the public road reserve;
- Access to loading areas should be clearly separated from pedestrian and bicycle access routes, and where practical, separated from vehicle access routes;
- Ensure storage and loading areas are of sufficient size and dimensions to avoid the use of car parks for temporary storage of goods;
- Loading areas should be clearly defined with line marking, designed to allow unobstructed vehicle access and provide appropriate turning areas; and
- Allow for sufficient and safe collection of waste materials.

In sum, all open storage areas shall be screened from the roads and adjoining properties by landscaping, fencing and/or other means acceptable to the Client and the Authorities. No open storage of goods, unserviceable vehicles or machinery shall be carried out on within the front boundary setback area (forward of the building line), which shall be used only for landscaping and drainage, car parking, servicing, loading and unloading, or where appropriate for trade display. Similarly, rubbish bin storage areas must also be screened from all road frontages.

Boundary Fence

The intent of boundary fencing in the Lagos FTZ is to provide security for businesses without compromising the visual aesthetics and overall character of the development. General boundary fence guidelines are as follows:

- For visibility, high solid-wall fencing should be discouraged on buildings along the major arterial roads;
- All walls and fences shall be constructed of durable materials compatible with buildings on the same lot in terms of appearance, color, materials and finish. All walls and fences shall be constructed entirely within individual land parcel except where common walls agreed upon by adjoining investors. When a boundary wall or fence is set back from a property line, the land between the property line and boundary wall shall be landscaped, irrigated and maintained by the investor;
- The minimum fencing standard is an 1800mm high metal tube framed vertical pale and horizontal rail fence with powdercoat finish;
- Boundary walls fronting the Major Arterial Roads to have at least 70% fencing and 30% solid wall. This is to prevent visually monotonous solid walls along these prominent roads.
- Fencing design shall be kept simple. Grillwork, when used shall have interesting meshing or in simple linear elements finished in matt black. The use of barb wire and electric fencing will only be permitted if considered suitable by the Client.

Signage

The purpose for regulating existing and proposed signage are to ensure that these do not reduce the value of their surroundings, are appropriate and consistent for the type of activities to which they relate to, and that they are placed in a safe manner and do not create any hazardous conditions.

Entrance signs, building identification signs and all free standing signs should be well designed and constructed of quality materials in keeping with the architectural features of Lagos FTZ. Building signs shall be coordinated and integrated with the design of lighting and site furnishing to minimize the cluttering of individual streetscape elements. The content for all signs shall be displayed in English.

The objectives are as follows:

- To ensure signage and advertising is designed and located to be compatible with other development in Lagos FTZ;
- To provide for the identification of businesses in a way that maintains the character and amenity of the road;
- To ensure signage is informative and coordinated in a way that enables customers to easily locate the industry or business and determine its services; and
- Each sign is to maintain a secure and safe condition. If the Client and/or Relevant Authorities are of the opinion that a sign is not secure, safe, or in a good state of repair

or maintenance, written notice of this fact shall be given to the person responsible for the sign.

The Signage Guidelines are as follows:

- Signage within individual developments must be related to a single concept, with each individual sign integrated into the overall design theme;
- Illuminated signs may be approved provided they do not flash or rotate;
- All signs shall be designed as an integral part of the building fabric, and shall be of a standard equal to and consistent with the building design and detail;
- All signs throughout a plot shall be of consistent character in design to maintain the amenity of the area;
- Signage should be integrated into the design of buildings by forming a logical element of the front facade and be in keeping with the scale of the façade;
- Where a building has sufficient frontage that two or more separate and distinct vehicular entrances are required, then additional and identical signs, will be allowed at the rate of one sign per entrance;
- Where there are multiple business occupancies within the one plot, one shared sign should be provided that details the location of the businesses. A small identification sign may be provided for each business that it is coordinated with the shared sign in terms of style and materials;
- Freestanding signage should be avoided and will only be permitted if it can be demonstrated that signage on the building facade will not provide effective business identification. If freestanding signage is permitted, it should integrate with the overall design of the site in terms of scale, form, landscaping and materials, and should not detract from the streetscape character and key views to the area;
- Directional signage should be provided within sites to delineate entries and exits, staff and visitor parking, office /reception areas, and loading areas. Directional signage within the site should be consistent in style and form; and
- Temporary advertising signs and free standing roof signs are not permitted.

Landmark Sign

Freestanding landmark signs are an excellent choice for identifying industrial and business parks, or in this case one huge landmark sign for Lagos FTZ. The landmark signs should be iconic, easily identifiable from a distance, and designed to match the architectural style of Lagos FTZ.



Sample of Signage

3.0 ACCESS AND PARKING

Access and Circulation

Lagos FTZ has been designed for pedestrian, cyclist, trucks, buses and cars. The key concerns relates to functionality and safety requirement for access, loading/unloading and parking.

Pedestrian and cyclist access

An importance feature of Lagos FTZ is to encourage pedestrian and cyclist movement. The following is the key objectives.

- To provide safe and convenient access for pedestrians and cyclists within Lagos FTZ;
- To provide adequate walking and cycling facilities within Lagos FTZ;
- To encourage walking and cycling as suitable transport alternatives in order to reduce numbers of vehicle trips.

Guidelines

- Provide clearly defined pedestrian and cyclist entry points from the footpath / shared path into the industrial or business site. The pedestrian and cyclist entry should be separated (e.g. by landscaping) from all vehicle movements;
- Separate pedestrian and bicycle circulation from vehicle movements, particularly loading and servicing vehicles;
- Ensure clear sight lines to vehicle crossovers are provided for pedestrians and cyclists;

- Design driveway access to minimise vehicle and pedestrian and cyclist conflicts by maintaining clear viewlines between the exiting or entering vehicle and pedestrians. Landscaping, fencing and building design are key considerations;
- Provide secure bicycle parking areas within plot.

Vehicle Access

The intent to have vehicle access guidelines for Lagos FTZ is as follows:

- To provide safe, convenient and efficient access for all vehicles to and from industrial, commercial and residential areas;
- To provide access and car parking arrangements that are logical and legible to visitors and employees;
- To minimize the impacts of driveway crossovers on pedestrian and cyclist access and streetscapes; and
- To minimize the impacts of traffic on surrounding sensitive land uses.

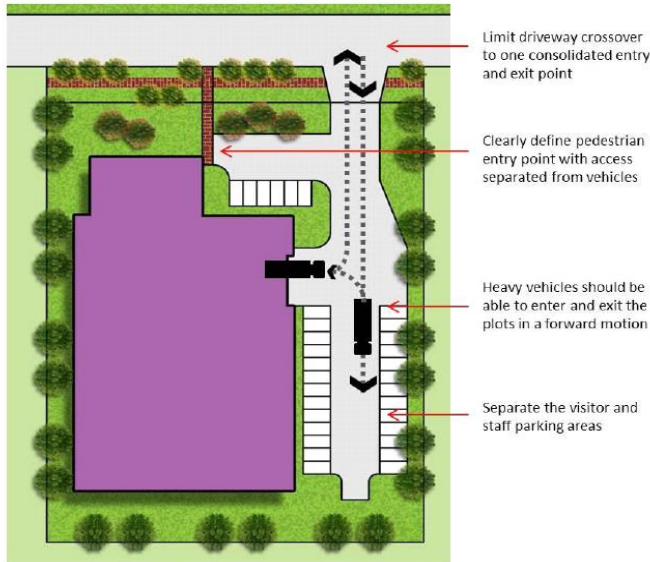
Guidelines

- Developments should be designed to allow all vehicles to enter and exit a site in a forward motion. This applies to all plots regardless of plot size;
- Locate vehicle access points to the industrial, commercial or residential site in a location that enables clear sight lines along the road enabling vehicles to enter and exit safely and efficiently;
- For industrial plots where double access is required, a traffic assessment report should be provided to demonstrate that the vehicle can enter and exit and maneuver within the plot safely and efficiently, and with minimal impact on the streetscape and surrounding uses;
- Limit driveway crossovers to one consolidated entry and exit point for each site in order to minimize disruption to footpaths. Additional crossovers may be permitted for larger plot where a loop circulation network is required within the plot.

Parking

There should be sufficient number of parking bays provided within each plot in Lagos FTZ. This is to avoid road-side parking especially along the local access roads so as to ensure smooth traffic flow within the development. All parking spaces and vehicle access must be contained on site.

The objective is to provide sufficient car parking for the needs of the business or industry within the site without adverse impacts on streetscapes.



Sample of Plot Parking Requirement

Vehicles parking bays for commercial and industrial plots will be provided in accordance with the general provisions specified in the following table.

Parking Standards for Industrial Plots

1 car parking lot	: 500 m² GFA
1 motorcycle lot	: 250 m² GFA
1 lorry lot	: 1,500 m² GFA

However, it is advised that a reduction in car park provision may be considered where a development is being purpose built for a known end user and it can be demonstrated that lower car park numbers are required on the basis of employee numbers, alternative transport options and likely client / visitor numbers. An area on the site will need to be set aside so that the full car parking requirements can be met to authorities' satisfaction in the future if necessary. This area will need to be landscaped and maintained in the interim;

The standard dimension for a car parking space should be taken as 2.5 m x 5 m. For heavy goods vehicles, the dimension should be 3.5 m width with lengths of 12 to 14 m for rigid vehicles and 17 to 19.5 m for articulated vehicles. If there are obstructions on one side or both sides, the width should be increased by 0.25 and 0.5 m respectively. The parking aisle width should be a minimum of 9 m for 90 degrees parking stalls (12 m for articulated trucks). The minimum clear driveway width should be 4.5 m for one-way and 7 m for two-way. The ingress/egress, parking access and driveways should have a width minimum of 3.5 m per lane.

There shall be a setback for parking lots at a minimum of 2 m from the front property line and 1.5 m from any structures, unless specified otherwise in these regulations.

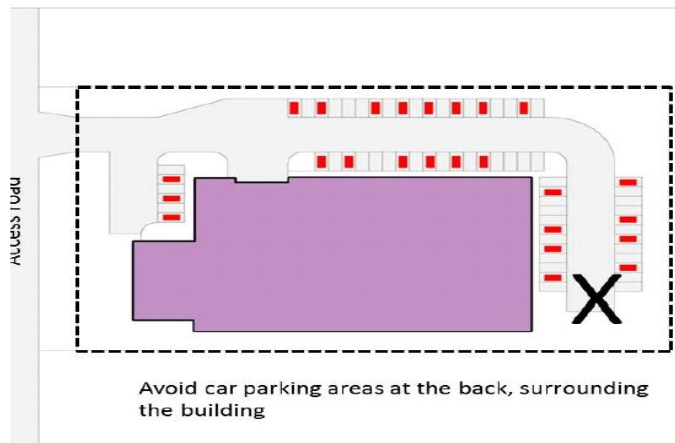
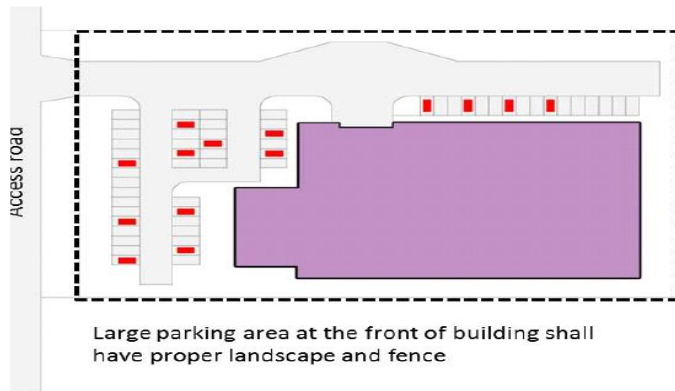
The parking areas shall be designed with sufficient rooms for maneuvering of articulated trucks. Smaller areas can be used if the area is restricted to rigid trucks only. To enhance efficiency of land and convenience for visitors, parking spaces are to be shared by different groups of facilities at amenity centers (e.g. local shop, parks and amenity).

Parking and loading areas shall not be used for automobile sales, petrol sales, storage, repair work, dismantling or servicing of any kind.

Required parking areas for more than five vehicles shall have individual spaces marked in accordance with adopted standards. Required off-street parking areas for more than 20 vehicles shall have aisles, approach lanes and maneuvering areas clearly marked with directional arrows and lines in accordance with adopted standards.

Loading areas shall be provided entirely within the site of the facility they serve. No loading/unloading areas for trucks or commercial vehicles shall be permitted between a building and a front property line.

Bus pick-up/drop-off area is permitted shall also be provided for every 50 persons requiring bus transportation.



Road Buffer Requirement

Road buffer requirements aim to protect the occupiers of the building from visual intrusion, noise and other pollutants from the road, thereby directly enhancing the environment quality of the area in relation to streetscape, building size and building density. The buffer requirement is commonly determined by the road category which the plot faces (front setback) and a single standard, regardless of the number of storey-height of the building. The guidelines are as follows:

Road Buffer Requirement

Road Buffer Requirements For All Developments			
Category of roads	Minimum width of buffer (m)	Specification of buffer (m)	
		Green (min.)	Physical
Expressway)	15	5	10
Major collector (CAT 1) and Coastal Road	10	3	9
Local Access (CAT 2)	7.5	3	4.5

Green buffer: a strip of land strictly reserved for tree planting, landscaping and turfing, no other uses will be allowed except for ancillary structures as permitted in the table below.

Physical buffer: a strip of land within which allow car parks, driveways, walkways and ancillary structures as permitted in the table below are allowed.

Ancillary Uses Within Road Buffer

Small Ancillary Structures Allowed Within The Green Buffer And The Physical Buffer	
Buffer Specification	Ancillary Structure*
Green Buffer	Guard house (< 2.6m high)
	Bin point (<1.8m high)
	Flag pole/ lamp post
	Meter compartment (< 1.8m high)
	Landscape light fittings
	Entrance gate/post
Physical Buffer	Guard house (>2.6m high)
	Bin point/centre (>1.8m high)
	Car porch/ shade canopy
	Gas pressure regulator kiosk
	Gas governor house
	Above-ground electricity box
	Ring main compact units – reinforced concrete structure/ fenced-up area
Below-ground structure	

Ancillary structures that aesthetically enhance the development should be of appropriate size, strategically located and tastefully designed to blend with the overall layout of the

development. Height of ancillary structures should be appropriate to the development setting and the surrounding built environment.

Operational structures in industrial and warehouse development that do not significantly add to the building bulk and are required to be located in the open should be designed to limit the adverse effects and minimize nuisance. Equipment and unsightly structures should be screened from view of public street and neighbouring plots to reduce any noise or other nuisance.

4.0 URBAN DESIGN TREATMENT

Building form, articulation, design and finish are subject to the approval as part of the required development permission for each property by the relevant authority. All buildings shall present a quality image when viewed from public roads and related open spaces, while a more basic, light industrial expression will be acceptable for building facades oriented to loading areas and service driveways.

In addition to the Development Guidelines, investor shall adhere to existing Bylaws, specifically those relates to the safety and security aspects.

Building Form

Elements such as main entry points should be designed and positioned so they may be easily identified. The visual massing of the buildings should be configured to ensure a human scale at the pedestrian level. This may be achieved through the articulation of building facades facing public roads, variations in the building footprint and elevations, and the use of elements such as sunshades.

The following principles are a guide to the development of an appropriate architectural character and aim to achieve a good standard of building design throughout Lagos FTZ.

Building frontage and entry.

- The front elevation must be designed to address the street, provide a corporate image and an inviting entrance;
- The main entrance is to be on the front elevation or close to the front of the building, clearly visible from the street;
- Entrance points to buildings are to be designed as focus points and must provide protection for pedestrians by means of substantial integrated building elements such as a veranda, canopy or walkway;
- Building elevations on corner lots must address both street frontages with a good standard of architectural design;
- Architectural form and character must avoid large unrelieved expanses of wall or roof, where they can be seen from the public realm; and
- Where more than one building is planned for a site, their design must result in the creation of a group of integrated buildings presenting a harmonious image.



Materials, Finishes and Colour

Buildings with broad facades of a uniform finish shall be avoided. The aim should be to divide up the facades into contrasting smaller areas by introducing colours, materials and forms. Simple building structures need not be bland and unattractive; consideration should be given to 'breaking up' the façade to create interest. The objectives are as follows:

- To provide a coordinated palette of colours, materials and finishes within industrial and business areas.
- To provide materials that is durable and robust.

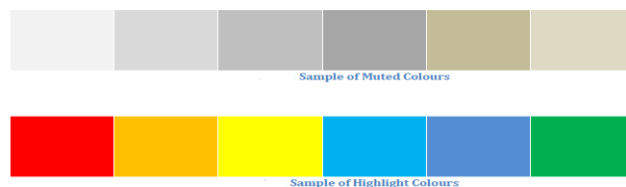
Guidelines

- Utilize materials that reinforce the built form and landscape such as corrugated iron and textured concrete. Avoid the excessive use of heavy looking materials and unfinished pre-cast concrete walls;
- Utilize a mix of materials and colours particularly within the visible facades, to provide articulation to the buildings and visual interest to the roads;
- Materials should utilize muted, earthy tones or highlights colours approved by the Client;
- Where the rear or side of a building is visible from a publicly accessible area, provide articulation or utilize a textured surface treatment in order to provide visual interest;
- External finishes should be of low reflectivity to minimize glare and reflection to surrounding areas.
- Use of different materials such as concrete panels, profiled metal cladding, fibre cement cladding, face brickwork, stone panels separately or in combination;

- Use of the above differing materials to express changes in the form of the building;
- Feature elements such as the louvre vents and screens, exposed steel columns and bracing, careful placement of roller shutters, to achieve good design;
- Use of vertical, horizontal and/or angled grids to break up unrelieved wall surfaces. These could be expressed feature joints in pre-cast concrete panels, fibre cement panel joints, brick banding or rendered panels;
- Division of the façade into top, middle and bottom elements using differing materials, grading of colours, horizontal lines such as dado line or parapet cappings;
- Projecting features such as canopies, sun shading, overhanging roof etc. to create shadows on the facades.

Where a single development comprises multiple units occupied by multiples independent tenancies such as ready-built factories, the use of colours, finishes and materials for each unit should be complimentary, whilst allowing each tenancy to be easily distinguishable and identifiable.

Sample of built form colours schedule are indicated below:



Large building façade should be treated with muted colours and tones avoiding strong hues. The highlights colour can be used on small and important building elements such as a feature wall, canopies, steel bracing and columns, sunscreens, ventilation louvres etc. to provide visual interest and relief on the building facades.

Natural Light and Ventilation

The following guidelines aimed to aid the conservation of non-renewable energy and improve employee comfort by assisting the penetration of natural light and ventilation. The investor is encouraged to incorporate a minimum side boundary setback of 4 meters. This approach allows buildings to feature openings on both side walls therefore assisting natural light penetration and cross flow ventilation. However, in the interest of maximizing the developable area in Lagos FTZ, the Client shall also consider alternative design solutions to assist with natural light penetration and ventilation so that buildings can be constructed with a nil side and rear setback.

The following building treatments are optional initiatives designed to assist natural light penetration and building ventilation. Investor will not be bound to, nor should be limited to, the following design treatments, however where nil side and rear setbacks are proposed, building designers will need to demonstrate the building's ability to capture natural light and allow cross ventilation to the satisfaction of the Client.

Natural light

- Rooflights

To introduce UV filtered sunlight into the centre of the building (consideration should be given to minimising solar gain by careful selection of the translucent rooflight material)

- Clerestory windows

To introduce natural light, preferable diffuse southern light, into the centre of the building, thereby reducing the requirement for artificial lighting.

Ventilation

- Side wall ventilation openings

To encourage cross-ventilation through the building

- Clerestory windows

To provide an outlet for warm air rising to a high level within the building and to promote cross ventilation.

- Wind powered ventilation turbines

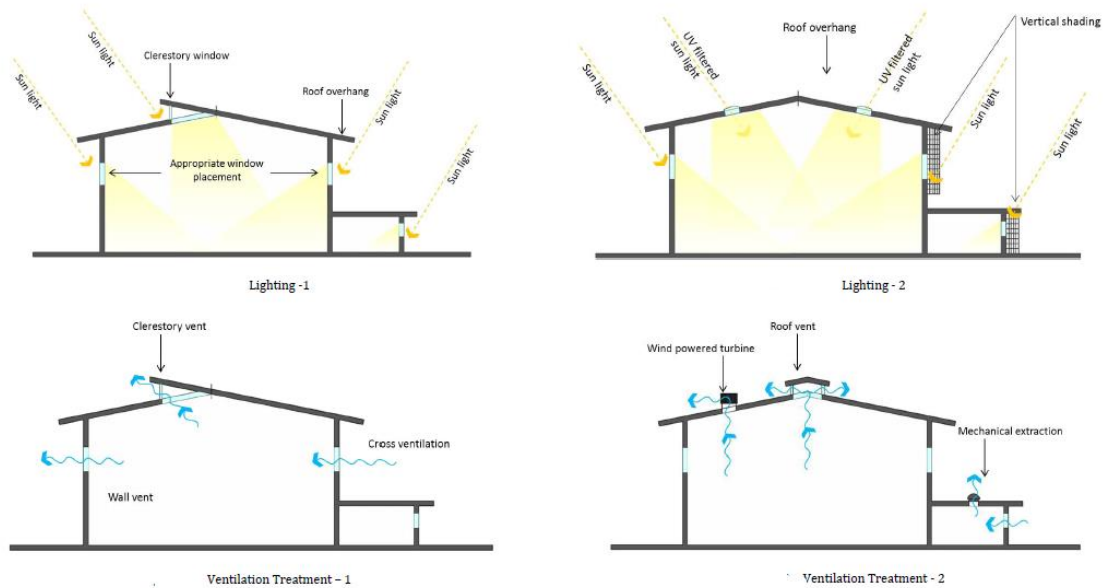
To aid the relief of hot air at high level and to encourage cooler air to enter at low level in the building, thereby generating a 'chimney stack effect' for air circulation.

- Roof vents active or passive

Large relief vents or cowl to further increase upward air flow in the building.



Sample of Natural Light and Ventilation



Industrial Plant and Equipment

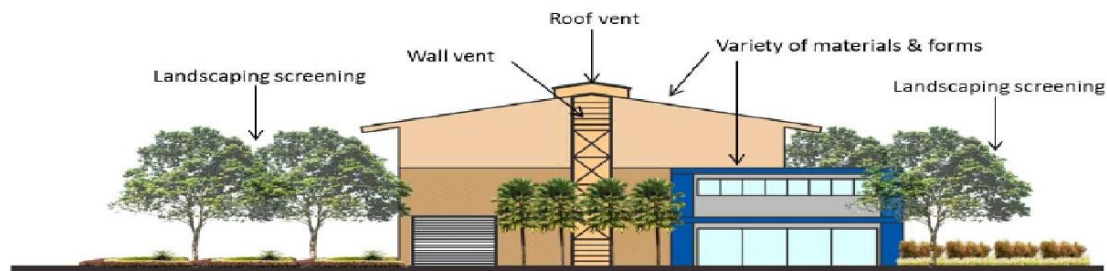
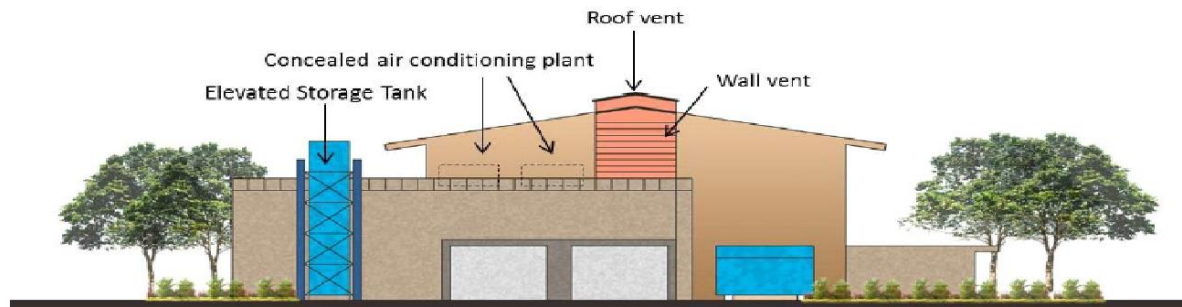
With exception to the petrochemical plant and liquid storage, all other industrial plant and equipment should be screened or remote from public areas, particularly from the roads. The exception to this may be where stacks or ductworks that are necessary for the building function are carefully considered and become feature design elements of the building. The following figures are examples of how plant and equipment can complement the built form outcome.

Plant and Equipment

- Consider using plant and equipment as design features;
- Conceal unsightly plant such as air conditioning units;
- Use of passive sustainable elements (water tanks/ventilation louvres) as design features

Combining Features

- Varied built form expressing different forms, materials and colours
- Use of landscaping for screening and shading;
- Expressed office form and entry;
- Sustainable elements as design features;
- Appropriate building signage



Sample of plant and equipment arrangement

5.0 Landscape Treatment

The landscape development associated with Lagos FTZ should be designed to facilitate safe and intuitively clear circulation, while creating an attractive, setting for employees and visitors. Investors should look for opportunities to create a park-like setting that offers long last interest with a landscape particularly focus on front open areas and sides between plots.

Setbacks, Planting and Plant Palette

- All required minimum front setbacks shall be landscaped;
- Each developed plot shall provide not less than 10% of the gross site area as on site landscaping;
- All areas of the site not otherwise developed shall be maintained in a natural state or properly paved;
- Landscaped materials shall be of a low maintenance type. Trees, shrubs and ground cover shall be preferred to flower beds;
- Landscaped materials to provide screening must be retained on a year round basis;
- The Landscape Plan by landscape architect appointed by investor shall incorporate the principles of the Storm Water Management Plan such as the use of sustainable and low maintenance landscaping and storm water collection and irrigation systems; and

- All planted areas shall be maintained to high standards.

Responsibility for Landscaping Maintenance

The owner of the property, or his successor, or assignees, shall be responsible for the proper maintenance of the landscaping. All plantings are kept in a healthy, trimmed and growing condition. Watering, fertilization, cultivation and tree pruning shall be considered part of regular maintenance; and

Open space and landscaping from the edge of the road to the plot line will be taken care of by Lagos FTZ park manager and the land is belong to the FTZ and Lagos State and will be maintained by them from installation date.

Landscaping of Undeveloped Areas/ Future Phases

Landscaping plans will be required for phased or undeveloped areas and must incorporate provision for erosion control on all graded sites which will remain vacant for six months or more. Undeveloped areas shall be maintained in a weed-free condition, and leveled, graded and grassed.

Landscaping within and for Parking Areas and Storage Areas

- There shall be landscaped open space within the interior of parking. This landscaped open space is in addition to the screening requirements with respect to other areas. Landscaped open space in parking areas shall be provided to provide shade;
- Landscaped parking islands/peninsulas (min. 2.5m wide spaced every 10 bays) are required to break up the parking lot. These islands/peninsulas are to be constructed using soft landscaping materials;
- The open space shall be located within the parking area so as to provide visual relief and break up large expanses of parking into smaller cells;
- A parking area which is visible from an adjoining site or public adjacency shall have a screen planting;
- A garbage collection area or an outdoor service area which is visible from an adjoining site or public adjacency shall have screen planting. The location, length, density, and height of such screen planting shall be provided and maintained to block the view from adjoining sites or public adjacencies.

Amenity Space

- Amenity areas are required in the landscaping to serve as space for active or passive recreation and enjoyment of the building occupants.
- Exterior amenity areas may include shelter/ gazebo, garden, and walking surface areas; and

Business park and residential may provide shelter/gazebo space which shall typically be at the front or side of the principal building, but the microclimate benefits should determine location considerations.